

COUNCIL ON PHARMACY AND CHEMISTRY.

Capsules Glycerphosphates Comp. (H. K. Mulford Co.) will be added to the list of new and non-official remedies approved by the Council on Pharmacy and Chemistry, which will be published in the Journal July 4.

Isoform Powder (Koechl & Co.) having been withdrawn from the market, has been omitted from the list of articles accepted for new and non-official remedies, at the request of the American agents.

Investigations made under the direction of the Council having demonstrated that the claims made for Isopral (Farbenfabriken of Elberfeld Co.) are not justified by the facts, the Council has voted to omit this article from the list.

ALAMEDA COUNTY.

The meeting was called to order at 8:30 o'clock; Dr. E. M. Keys in the chair.

The program of the evening was conducted by Dr. Jas. Hogan of Vallejo and his assistant, Mr. West, giving a complete example of preparing and standardizing the various vaccines; showing many details of laboratory technic; greatly simplifying the work as well as the paraphernalia.

An ingenious device for regulating the heat of an incubator with an electric light was shown, as well as the method of making pipettes and capsules for the emulsions and solutions. The technic of the entire process was fully covered. In conjunction with the above demonstration, Dr. Hogan read the following paper:

Personal Experience with Bacterial Vaccines.

At the June meeting of the Northern California District Medical Society, held in Napa last year, I read a paper on the "Opsonic Index," and gave a practical demonstration of Wright's technic.

At that time I was completely "opsonized" and hoped that by the time a year had passed I would be able to show tables of indices taken in all the cases I have had under treatment; but I am sorry to say that I have not been able to obtain satisfactory indices in any case and have been compelled to carry on the work from a clinical standpoint, getting marvelous results in some cases and failures in others.

This was very discouraging at first, but as the majority who are working in this field report the same trouble I felt that the failure is not all my fault.

Some expert bacteriologists claim that it is not possible to get a satisfactory index at all, others claim to do so in every case, and while my experience would put me in the same class with the former, I wish that I had the ability of the latter, as I believe that there is no better way to regulate your dose and space the intervals than by the aid of the opsonic index.

I would have been tempted to throw up the work in the start if it had not been for the fact that my first case was one of colon bacillus infection of the kidney of an acute type in an old lady who had been treated with all the urinary antiseptics, etc.

I found a pure culture of colon b.; made a vaccine; tried for several days to get satisfactory indices, and in desperation gave an initial dose of fifty million. The result in this case was a clearing up of all the symptoms in a short space of time.

The literature on this subject has assumed such enormous proportions that at the present time it would take one's whole time to follow it. And so, instead of giving extracts from the literature, I will simply give you a statement of facts from the knowledge that I have acquired in ten months' work, fortified by the results of others.

I will refrain from touching on any of the theories of opsonic work, as splendid articles have appeared in the journals from time to time by such prominent

workers as Wright, Ross, Allen, Hekton, Hollister and others.

It is the consensus of opinion that the best results are obtained from a vaccine made by isolating the organism from the patient's own lesion. There are some conditions that may mitigate against this, notably:

1. Where the isolation of the organism is difficult and tedious, as in tuberculosis.
2. Where the infection may be so acute that the loss of time consumed in making a vaccine would put the patient beyond help.
3. Where the infection is so chronic that the virulence of the organism has been greatly reduced. An example of this is in chronic gonorrhea.
4. Where you are dealing with organisms of definite type—as bacillus septus, and the pneumococcus.

If any of these conditions exist the use of a stock vaccine will have to be resorted to. I have had no experience with the use of stock vaccines, excepting in tuberculosis. Here we use the method of Wright, using Koch's T. R., diluting it until 1 c.c. equals 1-500 mg. of dried tubercle bacilli, and using from 1-2000 to 1-1000 mg. at a dose. I have no doubt that better results will be obtained in the use of a personal vaccine even in these cases.

Preparation of vaccine.—It is best, first, to determine whether you are dealing with a pure or a mixed infection. In case it be a mixed infection you will have to plate out the culture and isolate your organism in that way. Finding that you have a pure culture, select the medium that it best grows upon and transfer it to a broad surface, so that you will have a good growth. Taking a twelve to twenty-four hour growth, you are ready to start your vaccine. Add enough 1-10 per cent saline solution to cover your field of growth and by rubbing with a platinum loop emulsify the growth.

Pour the emulsion into a centrifuge tube and add enough saline solution to measure 5 c.c. Whirl for about three minutes, when all the large clumps will have been sedimented.

The centrifugated emulsion is now carefully poured into a test tube, taking care not to disturb the sediment; in the test tube also place about fifty small glass beads, draw out upper end of test tube in a Bunsen flame and seal. A thorough shaking will cause the beads to break up any small clumps not thrown down by the centrifuge. The emulsion, now called the concentrated vaccine, is placed in a steam sterilizer and a temperature of 60° C. maintained for one hour. This is sufficient to arrest all growth in the tube. The next step is to standardize the vaccine. This is done by taking equal volume with blood in a "capillary pipette." A mark about $\frac{3}{8}$ inch from end of pipette is made, representing the unit of volume.

First draw up into the pipette four or five volumes of 2 per cent sodium citrate solution, then a small volume of air, next a volume of fresh blood, another volume of air, and finally a volume of emulsion. Mix by alternately drawing in and expelling the mixture on a clean glass slide. Divide into three parts and make smears upon clean slides. Dry smears in air and stain with any good blood stain, such as Leischman's. We are now ready to count. This is accomplished under a 1-12 inch oil immersion lens. Count the number of red blood cells and bacteria in each field, or until 500 red cells have been counted. Allowing five million red blood cells to the cubic millimetre, the product of five million and the number of bacteria counted, divided by 500, or the number of red blood cells counted, will equal the number of bacteria in one cubic millimetre of the vaccine. This, multiplied by 1000, will equal the number in one cubic centimetre. Having found out the number of organisms per c. c. of the concentrated vaccine, dilutions are now made to any de-

sired strength, such as 100, 250, and 500 million per c. c., for convenience in administration. The vaccine is now lysolized by adding sufficient lysol to equal 0.25 per cent.

Sufficient vaccine for individual doses is now placed in glass tubes and the ends sealed off in a flame. The vaccine is now rendered sterile by maintaining a temperature of 60° C. for one hour, after which it is ready for use.

W. L. B.—Age, 24. Occupation, fireman. Father and mother alive and well. Enjoyed the best of health until March 15, 1908, when he received an infected wound of the back of right wrist. The inflammation extended to the back of right hand. Wound discharged pus for three weeks. On the 5th of April patient complained of pain in the region of the right kidney. The pain became so great that on the 8th he had to give up and go to bed. Patient was brought to my hospital on the 27th of April, 1908. Condition: Pulse, 100; temperature, 100° F. General condition poor; had lost 21 lbs. weight since receiving wound in hand; had had night sweats for the previous eight days; examination showed great tenderness in the region of right kidney. Blood count showed reds 4,872,000, whites, 12,000, polys. 86%, lymphocytes 14%. Urinalyses showed a few leukocytes but not t. b. Sputum analysis failed to show t. b. Ophthalmo reaction was negative. Blood culture failed to reveal any organism. Examination of feces was negative for t. b. Patient showed all signs of pus intoxication. A diagnosis of abscess of the right kidney was made. On the first of May operation revealed two abscesses in the right kidney. The kidney was extirpated. An agar slant inoculated with pus from the interior of the kidney showed staphylococcus pyogenes albus in pure culture. The patient made a good recovery from the shock of operation, the kidney secreted normal urine in normal amount, but the patient still showed signs of a severe general infection, while the temperature ranged from 100° to 103° F. A vaccine was prepared from the culture of staphylococcus and on the 7th of May a dose representing 250 million cocci was given. No apparent clinical change was noticed, although the patient stated he felt better. On the 9th of May a dose representing 500 million cocci was given. On the 12th of May a dose representing 750 million cocci was given. No reaction, but patient still stated that he felt better. On the 23d of May a dose representing one billion cocci was given. On the 5th of June a dose representing one billion cocci was given, after which a rapid convalescence followed. We know that some cases of pyemia recover, but this seemed such a hopeless case that I feel the vaccines had a great deal to do with his rapid recovery.

J. B. McC.—Age, 46. Occupation, proprietor beer bottling establishment. Single. Father and mother still living and well. Average weight, 174 lbs. Had two attacks of pleurisy, the last being in April, 1907. Temperature sub-normal. Coughs some, but cough is not troublesome. Expectoration, profuse. Weight, 152 lbs. General condition poor. Pleurisy painful at times. Tubercle bacilli are present in the sputum in medium numbers. Physical signs: Dullness left side. Case diagnosed as pulmonary tuberculosis. Presented himself for treatment 2nd August, 1907, and an injection of 1-1000 mg. of tuberculin T. R. was given, to be repeated at intervals of ten days each. A marked reaction was noticed after the first five doses, also a slight reaction after the tenth dose. After the third injection there was a decided improvement in the patient's general condition, also the pleurisy had improved, but the patient complained of profuse expectoration.

A microscopic examination of sputum showed a great decrease in the number of tubercle bacilli, but there were many pus cells and staphylococci present. A specimen of sputum was received into a sterile

jar and carefully washed in sterile water. A loopful was taken from the center of the sputum and an agar slant inoculated. A rich growth was obtained and after plating the staphylococcus pyogenes albus was isolated. From this a vaccine was made, and on the 12th of November a dose representing 100 million cocci was given, to be continued at intervals of ten days, in addition to the tuberculin.

Patient continued to improve and on the 1st of January the weight was normal and the tubercle bacilli absent from the sputum. By March, 1908, the sputum was well cleared up and expectoration very scanty. At the present date the patient "is the picture of health," has neither cough, pleurisy, nor expectoration and sleeps and eats well.

A. S.—Age, 53. Occupation, wharf builder. Single. Father died of old age. Mother living and well. Normal weight, 190 lbs. Had pneumonia in January, 1906, being sick three weeks. Had a hemorrhage in November, 1906, and started to lose weight. Had more hemorrhages through the winter, six in all. Presented himself for treatment in November, 1907, one year after date of first hemorrhage. Weight, 165 lbs., 25 lbs. less than normal. Much debilitated. Sputum contained tubercle bacilli in large quantities. Running an evening temperature of 99.5° F. Expectoration medium. Cough not troublesome but greater in morning. Physical signs: Both apices. A diagnosis of pulmonary tuberculosis was made. On the 19th November a dose of 1-1000 mg. of tuberculin T. R. was given, followed by a marked reaction. Since that time the tuberculin has been given in the same dosage at intervals of ten days. There has been no reaction after that of the first dose and the patient has improved slightly. Patient's sputum still contains tubercle bacilli, but he has gained nine pounds in weight, and feels stronger. He sleeps well, has a good appetite and is able to be about town.

J. S.—Age, 31. Occupation, drygoods clerk. Both parents alive and well. Normal weight, 165 lbs. First seen 10th October, 1907. History of a hemorrhage three years before, followed by a cough. A year later had a severe pleurisy of six weeks' duration, with loss of weight and great debility. Regained lost weight, but the following year suffered from another attack of pleurisy and has had acute attacks at intervals ever since, with loss of weight and night sweats. In June, 1907, was so debilitated that he had to quit work and since that time has been living on a ranch. General condition very poor. Weight, 122 lbs. Tubercle bacilli present in sputum in large numbers. A very distressing morning and evening cough with an evening rise of temperature. Large area of dullness at both apices. Diagnosis of pulmonary tuberculosis was made. On the day that the patient was first seen his evening temperature was 103.4° F. and he was ordered to bed until the temperature declined.

On the 14th of October, the temperature being normal, he was given 1-1000 mg. of tuberculin T. R., to be repeated at intervals of ten days each. A marked reaction followed the first injection and the patient regained his lost appetite.

The temperature continued normal and the patient regained several pounds in weight, but after the third injection had been given, in spite of the apparent improvement, the patient decided to go home to Canada and has since not been heard from.

I. B.—Age, 28. Occupation, butcher. Married, no children. Father died of phthisis; mother alive and well. Normal weight, 172 lbs. Had two attacks of hemoptysis with blood-streaked sputum in the interval. Last attack in June, 1907. Weight, 157 lbs. Average temperature sub-normal. Tubercle bacilli present in sputum. Physical signs other than loss of weight, none. A diagnosis of pulmonary tuberculosis was made and on 2nd August, 1907, patient commenced treatment. A dose of 1-1000

mg. of tuberculin T. R. was given, to be repeated at intervals of ten days each. The first dose created a very severe reaction. The second dose caused none, but the third, fourth, fifth and sixth doses each caused a slight reaction. Since that time there has been no reaction and the patient has steadily improved. Since January, 1908, the tubercle bacilli have been absent from the sputum. Since March, 1908, there has been no sputum at all, and the patient has been practically a well man. At present patient is employed as a laborer at the Mare Island Navy Yard, and his work causes him no discomfort at all.

E. K.—Age, 43. Occupation, bookkeeper. Married, one child. Previous disease, enlarged prostate, very severe. History of a cough and loss of weight for a year previous to first visit. Temperature subnormal. Appetite very good. No night sweats. Cough persistent, worse in morning. Expectoration profuse. Has a chronic laryngitis with huskiness. Mental condition very poor. Physical signs: Both lungs. A diagnosis of pulmonary tuberculosis was made. Presented himself for treatment on 6th January, 1908. A dose of 1-1000 mg. of tuberculin T. R. was given, to be repeated every tenth day. A marked reaction followed the first injection, and a slight reaction followed the second dose. Since then there have been no reactions. Patient commenced to improve after the second injection, and the improvement has continued. After the fifth injection the patient felt well enough to resume his duties and returned to his desk. The improvement continued markedly but after the eighth injection the patient decided to go to Arizona, where he now is, and letters from him tell of continued improvement.

Dr. L. A. F.—Age, 43. Occupation, physician. Married, no children. Father died of hemorrhage from bowels. Brother and one sister both died of phthisis. Had pleurisy in 1896; typhoid in 1899. In 1904 had a severe orchitis with chest pains and has had "grippe" every year since. Had an attack of whooping cough in 1907, and has had sick headache ever since. Presented himself for examination 19th March, 1908. General health fair. Weight normal. Temperature subnormal. A week or so before, having smoked six cigars in one evening, he expectorated a mouthful of blood. The next morning he expectorated more, and a week later about a tablespoonful, and has expectorated a slight amount twice since. Tubercle bacilli are present in the sputum. Cough not troublesome. No night sweats. Appetite good and patient sleeps well. A diagnosis of pulmonary tuberculosis was made. On the 28th of March a dose of 1-1000 mg. of tuberculin T. R. was given, to be repeated at intervals of ten days each. A marked reaction followed the first dose and a mild reaction the second. Patient gave up his practice and decided to camp out at Mount Atlas, near Napa, a spot admirably adapted to the treatment of phthisis. Patient states that he felt well and noticed some improvement, but after the fifth injection resumed his practice.

Mrs. McG.—Age, 36. Occupation, housewife. Married, one child. For two years had been suffering from a general malaise, with a feeling of fullness and swelling of hands and feet. Consulted several physicians and by one was told that she had Bright's disease. Urine has always been very acid and at times rendered micturition painful. Urinalysis stained centrifugate, shows numerous staphylococci. On the 25th of January a catheterized specimen of urine was procured in a sterile bottle, and several tubes of bouillon inoculated from it. Upon incubation it was found that a culture of staphylococci had been grown. Upon plating out the bouillon cultures it was found that there were numerous colonies of staphylococcus albus and a few of staphylococcus aureus. The colonies of albus were selected, and

agar slants inoculated from them. From these slants a vaccine was made, and on the 13th of January the first dose, equal to 300 million cocci, was given. The reaction was very severe. At intervals of ten days each the dose of 300 million has been administered. There were no reactions following that of the initial dose. The improvement, although very slow, has been steady. The urine has gradually cleared up, the cocci gradually lessening in numbers, and the transparency of the urine steadily improving. The patient is still under treatment and we heartily believe that a few more injections will suffice for a complete cure.

Mrs. McC.—Age, 68. Occupation, housewife. Married, six children. Had doctored for twenty years for a so-called "kidney trouble," and by one physician was told that she had Bright's disease. In August, 1907, was prostrated by an acute attack. There was an acute diarrhea, fever reaching 104° F., and great suppression of urine.

This attack simulated one of a year previous, and during which I attended her. There was no response to the usual medication of intestinal and urinary antiseptics and the patient's condition was most serious. Each urinalysis made showed a rod of colon character in the stained centrifugate. A catheterized specimen of urine, obtained under strict aseptic precautions and a bouillon culture made from it, showed a pure culture of the bacillus coli communis. From this culture a vaccine was prepared.

On the 29th of September an injection of a dose of the vaccine, equal to 50 million coli, was administered. The reaction was very severe, but the temperature dropped from 103.8° F. to the normal in three days.

The temperature was subnormal for ten days after this, when it rose to 103° F. A dose of the vaccine, equal to 100 million coli, was administered. There was a most alarming reaction after this injection, but the temperature was again reduced on the third day. After another subnormal period for seven days the temperature rose to 102°. The last reaction having been so severe, it was decided to administer but 50 million. This was done and after the second day the temperature had reached normal, and up to the present writing is still so. Two subsequent injections of 50 million each were given, each without a reaction. Seven months have elapsed since the last dose of the vaccine, and the patient has enjoyed uniformly good health ever since that time, attending to her household duties daily.

SAN FRANCISCO COUNTY.

Opening address by Dr. Levison.

Fellow members of the Society: On the 17th of April, 1906, I had the honor to present a paper before the State Medical Society and the following morning on the steps of the Y. M. C. A. building, the Society adjoined sine die. It was a veritable sine die adjournment and with the developments which so rapidly followed, it became a grave question in my mind as to whether another meeting of the Society would ever take place in our city. I might recall, if only for comparison, the first session of the physicians of San Francisco, many of whom were in dire distress, and then glance over the assembly room thus to realize how much has been accomplished and how little need we fear for the future of the Society. I refer to these events because they emphasize the satisfactory state in which the Society finds itself to-night, a state which the most imaginative of us could not have conjured up two years ago. We are to enjoy the re-establishment of our own library and meeting place and I think we may congratulate ourselves that within the short space of two years we find ourselves

housed in so excellent a library and assembly hall. The idea of combining an assembly room and library was first suggested to the Board of Directors by Dr. Philip Mills Jones and his plan was only approved of after the subject had been most thoroughly discussed by the directorate and it was finally accepted as being the most advantageous proposition which had been presented. Money was appropriated for the purchase of books, for binding the Journals, and also for the purpose of furnishing the rooms. This has nearly exhausted the funds of the Society but it was felt that the limited funds at its disposal could not have been expended more profitably. With a reference library supplied with the best journals published, in the center of a district which will be populated by physicians, this library is destined to occupy a foremost position with us. We are to have a graduated librarian, and a stenographer will have desk room so that it will be possible to employ her services whenever necessary. It will be the aim of the directors to make the library of the highest standard possible commensurate with our income. For that reason I would beg of you to do all in your power towards increasing the membership of the Society, for our income naturally depends upon the extent of its membership. Before closing I desire to take the opportunity to urge each of you to do what you can towards making this Society what it should be—the representative organization of the medical profession of the Pacific Coast. This can only be accomplished by the exhibition of active interest shown by a regular attendance at the meetings, by the presentation of papers which should be presented voluntarily and relieving the executive committee of unnecessary labor. There is surely ample material in San Francisco to make it easy to present a good program once a month and with the members sufficiently interested this will be possible. Furthermore you are urged to make frequent demonstrations of cases and these will be given precedence over papers. It is to be hoped that the members will participate more earnestly in the discussions and that they will prepare themselves for the same. To this end it has been arranged that a program committee shall publish a synopsis of each paper read, at least a week before the meeting. Fellow members, I bid you a hearty welcome.

SANTA CLARA COUNTY.

The regular society meeting was held Wednesday evening, June 17, at the St. James Hotel, with fifteen members present. Hon. J. E. Richards, judge of the Superior Court, was the guest of the society, and gave to our members a most interesting and instructive talk on "Expert Evidence." Judge Richards has promised a resume on the subject, which will be forwarded to the Journal. Dr. Osborne told our members of the work accomplished at the recent state meeting. The committee on prosecution of illegal practitioners made a report of its work as well as a financial statement. The society extended the committee a vote of thanks for the excellent work they have accomplished in this community. The next regular meeting will be held at the San Jose Carnegie Library and if the members so decide, that building will be our permanent meeting place. The manager of the Hotel Vendome has extended our society the invitation to hold one of our meetings at that hotel, and to be his guests for the evening. The invitation was accepted with thanks, and the date of meeting left to the executive committee. After adjournment, thirteen of those present sat down to the banquet table, and by the way the good things disappeared, apparently no one had any qualms about that supposedly unlucky number.

K. C. PARK, Secretary.

SAN DIEGO COUNTY.

Amendment to the by-laws, adopted June 5, 1908:

No member of this Society shall act as physician or surgeon of any hospital association or similar organization, and the name of any member so acting shall be immediately dropped from the rolls and notice of such action at once sent to the Medical Society of the State of California and the American Medical Association. No member of this Society shall consult with a physician or surgeon holding a connection with a hospital association in his hospital association work.

R. E. AUSTIN, Secretary.

PUBLICATIONS

Glimpses of Medical Europe. By R. L. Thompson, M. D., Professor of Pathology, St. Louis University School of Medicine. J. B. Lippincott Company. 1908.

This is the title of a little book, destined to make many friends in the medical profession. Its author has traveled wisely and well, and gives us his point of view on things medical as he found them on a recent visit to Europe. Besides visiting Norway, Sweden, Denmark and Russia—countries the average American medical man leaves out of his itinerary—the author has visited the usual places in France and Germany, and it is rare that one hears so much about them in so few lines. While no pretense is made of issuing a medical Baedeker, the detailed information which one finds in his book will be of very great value to any man who is going abroad to study. But this is not all. It is sure to awaken an irresistible longing for a glimpse at foreign clinics, for an apprenticeship with foreign masters, in the man who heretofore ignored European medicine, as well as in the man who, easily satisfied, thinks that his is the only country which offers unsurpassed opportunities for study. And lastly, the book will find favor at the hands of physicians who have been abroad, recalling their days in Europe and stirring many pleasant memories. The book is practical, it is entertaining—read it. R. B.

A Text-Book of Minor Surgery. By Edward Milton Foote, A. M., M. D., Instructor in Surgery, College of Physicians and Surgeons (Columbia University); lecturer on Surgery, New York Polyclinic Medical School, etc. D. Appleton & Company, 1908.

Of the books devoted to minor surgery, this one, in our estimation, is by far the best. Probably the most striking feature of the book is its excellent series of photographic illustrations. In these days the abundance of magazine medical literature is shortening the lines of text books, so that the dust of months accumulates on our ordinary surgical volumes. We are convinced, however, that this book under consideration will gather little mould of disuse. The subjects with which it deals are those encountered most often, and frequently dealt with in the poorest manner by the surgeon, just as the pictures are characterized by clearness, so the text is concise, sensible, scientific and right to the point. The blending of pathology and surgery, and the rational dependence of the operation suggested on the morbid condition and development, denote the trained, clear mind of the author. It is hard to overestimate the excellence and fitting character of any of the sections. The chapters on the surgery of the hand and on infections and inflammations are specially valuable. Almost equally good is the consideration of the various common tumors of the body, dealt with in minor surgery. In fact, after looking over the book with some attention the prac-